BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
12-12-14
04:59 PM

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.	R.14-08-013 (Filed: August 14, 2014)

COMMENTS OF THE WORLD BUSINESS ACADEMY ON THE ASSIGNED COMMISSIONER'S DRAFT GUIDANCE

Laurence G. Chaset
Keyes, Fox & Wiedman LLP
436 14th Street, Suite 1305
Oakland, CA 94612
Phone: 510.314.8386
Fax: 510.225.3848
lchaset@keyesandfox.com

Counsel to the World Business Academy

December 12, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.	R.14-08-013 (Filed: August 14, 2014)

COMMENTS OF THE WORLD BUSINESS ACADEMY ON THE ASSIGNED COMMISSIONER'S DRAFT GUIDANCE

In accordance with the provisions of Rule 1.4 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission") and with Acting Chief ALJ Sullivan's E-Mail Ruling of November 26, 2014, which granted the parties until today to file their Comments on the Assigned Commissioner's November 17, 2014 Ruling Re Draft Guidance For Use In Utility AB 327 (2013) Section 769 Distribution Resource Plans (hereinafter, "Assigned Commissioner's Ruling," the World Business Academy ("Academy") hereby provides its Comments on the Assigned Commissioner's Ruling.

As an initial matter, the Academy applauds and strongly supports both the overall direction of, as well as many of the specific details set forth in, the Assigned Commissioner's Ruling. It is obvious that in developing the Assigned Commissioner's Ruling, Commissioner Picker and his staff, working with Energy Division staff, have given serious thought to, and favorable consideration of, the issues raised in the Replies of the Academy and other, like-minded parties to the questions contained in the Draft

Scoping Memo contained in the August 20, 2014 Order Instituting Rulemaking.

Consequently, the following Comments on the Assigned Commissioner's Ruling will simply highlight certain important elements of that Ruling that should be enshrined as guiding principles in Distribution Resource Plans ("DRPs") to be developed by the Commission's jurisdictional utilities and ultimately submitted for approval by the Commission. The following Comments follow the section numbering used in the Draft Guidance Document attached to the Assigned Commissioner's Ruling.

Part One: A New Framework for Distribution Planning

Page 4 of the Draft Guidance Document states:

> "The primacy of AB 32 and Executive Order S-21-09 mean that, in order to deliver benefits, major energy policies initiatives must necessarily support the achievement of 2020 and 2050 greenhouse gas (GHG) reduction targets. The DRPs are no different. This also recognizes the fact that the underlying rationale for promoting increased deployment of the DERs specified by statute is that they have a critical role to play in meeting California's policy of significantly reducing GHG emissions from the State's electricity and transportation systems."

The Academy welcomes the Assigned Commissioner's broad perspective on this issue, particularly, his explicit recognition of the expected system impacts resulting from the imminent fusion of the stationary and transportation energy sectors as a result of increased deployment of battery-powered and hydrogen-powered electric vehicles.

Page 5 of the Draft Guidance Document states:

> "DRPs must recognize a balance between promoting grid modernization technologies and minimizing the total expected investment in this system while allowing for deeper penetration of DER throughout utility grids. This

is, indeed, a daunting challenge, but one that the Utilities and the Commission must face head on in this proceeding."

The Academy agrees with, and will do its utmost to support, the Commission's efforts in this regard. However, the Academy would note that although the initial capital cost associated with current investment in emerging and developing clean and carbon-free technologies may currently be somewhat higher than the capital cost of established fossil-fueled technologies, such investments will, in the longer term, pay rich dividends to, and ultimately will benefit, ratepayers. This is because, as our recent experience with wind and solar technology has shown, capital costs **WILL** come down as more investment is made in such technologies. It will also be critically important for the utilities' DRPs to evaluate the potentially dramatically increased cost for fossil-fuel-burning capital equipment in order to meet the state's increasingly strict GHG reduction mandates, as well as the risk to ratepayers of such fossil-fuel-burning equipment to become stranded assets long before their useful life is over. It is therefore incumbent -- on the utilities in the development of their DRPs, and on the Commission in evaluating the utilities' respective DRPs -- to include in their calculus of costs and benefits both a careful analysis of the potential longer term benefits of emerging clean and advanced technologies, as well as a clear-eyed appreciation of the likely long-term costs of continued reliance on fossil fuels.

Page 6 of the Draft Guidance Document states:

"Some Parties would like this proceeding, and the DRPs, to serve as platforms for reinventing the existing utility distribution services model – perhaps along the lines being investigated in New York State's "Reforming

> the Energy Vision" (REV) process. That is not the focus of this proceeding. The OIR decision correctly stated, "The goal of these plans is to begin the process of moving the IOUs towards a more full integration of DERs into their distribution system planning, operations and investment."

While the Academy *does* think that this proceeding could serve as a platform for "reinventing the existing utility distribution services model," we understand that the focus of the current effort is, first and foremost, to mandate the utilities to develop DRPs that will fully integrate distributed energy resources into the utilities' planning and operations. That said, the Academy would point out that a greater reliance on distributed resources and the increasing deployment of microgrids ultimately will force a full and fair-minded consideration of the current utility business model -- indeed, such a consideration is inevitable. For that reason alone, the Commission should at least identify the question of future utility business models as a component of longer-term utility planning for increased incorporation of distributed resources into their current systems and to specify the timing for when the question of future utility business models will be squarely addressed, both by the Commission and the utilities.

Page 7 of the Draft Guidance Document states:

> "It is my intent that in 2-3 years, we will move beyond questions like how to quantify and operationalize the locational value of DERs, towards a focus on the relationship between the Utilities, consumers, third-party DERs providers and the California Independent Systems Operator (CAISO). What we learn from this round of DRPs will help frame these discussions and provide a critical foundation to evaluate questions related to future business models and market designs."

The Academy agrees with this assessment but encourages the Commission and all participating stakeholders to focus on a 2-year deadline target for the accomplishment of this initial phase of the work.

Part Two: Description of Purpose and Scope of the Guidance

The Academy strongly agrees with the observation in the Draft Guidance Document, at pages 11-12 that:

> " . . . it is essential that Commission Staff and the Utilities make every effort to maintain close coordination among all of these proceedings in order to prevent duplication of effort, conflicting priorities and wasted economic investments. To the extent that activities in the DRP can or should impact the existing proceedings, the DRPs should identify areas in which the Commission needs to incorporate findings or activities from or into these related proceedings."

The Academy would also extend this notion to include activities in other proceedings that are likely to impact the utilities' DRPs. For example, a significant increase in the number of electric vehicles, as covered in the Alternative Fueled Vehicles proceedings (R.13-11-007 and R.14-04-014), will necessarily impact how distributed resources BEVs") or as hydrogen for fuel cell-powered electric vehicles. Similarly, policy developed in the Distributed Generation (R.12-11-005) and Energy Storage (R.10-12-007) proceedings will also impact policy regarding the deployment of distributed resources. Furthermore, the utilities' DRPs need to thoroughly investigate the use of microgrids as a key tool (1) to achieve the effective integration of ever expanding amounts of renewable resources, and (2) to increase overall system reliability.[1] The

[1] In this regard, *see* "21st Century Electric Distribution System Operations" (at

Academy therefore strongly encourages the Commission, in its final Guidance to the utilities regarding what is to be included in their respective DRPs, to mandate that such DRPs must reflect and incorporate the Commission's policy directives from such other proceedings in the development and elaboration of their respective distributed resources planning strategies.

The Academy also strongly agrees with the observation in the Draft Guidance Document, at page 12 that:

> " . . . the DRPs must explicitly recognize any existing or new Legislative mandates which may have a direct bearing on DER deployment."

One such legislative mandate is Senate Bill 1505[2], which requires that 33.3% of all hydrogen produced come from eligible renewable sources. The Commission should therefore specifically direct the utilities, in developing their DRPs, to explicitly acknowledge and to address this legislative requirement. An explicit recognition of this requirement will help guide the development of the Locational Value Analysis to be included in the utilities' DRPs, because distributed renewable resources will need to be deployed in order to help meet this specific legislative mandate.

///

///

---

http://resnick.caltech.edu/docs/21st.pdf), a visionary paper co-authored by energy economist, Dr. Lorenzo Kristov, Principal for Markets and Infrastructure Policy at the California Independent Systems Operator, and California Institute of Technology Scholar, Dr. Paul De Martini. This paper outlines a future energy system based on the distributed microgrid concept.

2 Chapter 877, Statutes of 2006.

Part Three: Commission Oversight

The Academy agrees with the observation at page 13 of the Draft Guidance Document that:

> "[a]s part of the final Guidance document, Staff may propose a schedule or menu of workshops or activities to this end."

It is the Academy's experience that open forums allowing collaboration between various stakeholders are extremely effective in producing consensus and a comprehensive solution.

Part Four: Guidance Distribution Plan Requirements and Definitions

The Academy agrees with the observation at page 19 of the Draft Guidance Document that the utilities' DRPs should include:

> " . . . a specification for a distribution planning level area level demonstration of high DER penetrations that integrate into the IOUs distribution system operations, planning and investment for implementation."

The Academy further concurs that such an

> " . . . analysis of potential benefits and locational values associated with high-DER penetration should be conducted at the Substation level"

as this would

> "serve as a prototype model which upon completion and refinement could be applied on a wider scale."

In this regard, the Academy is pleased to inform the Commission that it has, on its own initiative, already begun developing a distributed resource microgrid solution

utilizing the substation level as the nexus point to the transmission grid and other microgrids connected through their respective substations for the area of Santa Barbara County within the service territory of Southern California Edison ("SCE"). The Academy accordingly looks forward to collaborating both with the Commission and SCE in establishing this solution that the Academy is already working on as **THE** "prototype model which upon completion and refinement could be applied on a wider scale."

Definitions

Page 27: "**Distributed Energy Resources**":

The Academy strongly supports and endorses Commissioner Picker's inclusion of Stationary Fuel Cells as a component of Distributed Renewable Generation. Although stationary fuel cells can be deployed immediately to operate using either extracted or renewable natural gas, they retain the ability and can be easily and quickly modified to operate carbon-free using hydrogen electrolyzed from renewable energy. This flexibility, combined with the small footprint, quiet acoustic signature and extreme reliability of fuel cells, should place fuel cell technology high on the list of preferred resources.

The Academy would also respectfully urge that Commissioner Picker add "hydrogen electrolysis" as a sub-item to the "Electric Vehicles" category under "Distributed Energy Resources."

Page 28: "**Other DER**":

The Academy wholeheartedly agrees with Commissioner Picker's assessment that:

> "[g]iven that the statute [§769] defines distributed resources as having to be 'renewable,' the DRPs must first focus on the analysis of Fuel Cells, CHP and Internal Combustion engines that are fueled by renewables. That said, natural gas fueled stationary Fuel Cells, CHP and stationary I-C engines have the potential to reduce GHG emissions, and so the utilities are encouraged to expand the scope of their DRPs to include any distributed generation that can produce GHG emissions reductions over its lifecycle."

It is the Academy's contention that stationary fuel cell plants offer the optimal GHG reduction scenario in that they can be deployed immediately utilizing natural gas (without the emissions of fine particulate and other criteria air pollutants of combustion turbines) and then be transitioned at a suitable incremental rate to run 100% carbon-free on hydrogen made using surplus renewable generation.

Page 29: "**Cost Effectiveness**":

The Academy agrees with Commissioner Picker's observation that

> "DRPs seek to go beyond existing models of DER deployment, and as such current cost-effectiveness may be insufficient to fully characterize the value of DERs."

The Academy accordingly urges the Commission to maintain a flexible perspective concerning the relative cost effectiveness of a given DER, and to include the consideration of the long-term benefits that can and will result from the advancement of new technologies, such as stationary fuel cells, which are capable of offering a clear pathway to a carbon-free energy economy.

///

///

CONCLUSION

The Academy respectfully requests that the Commission take the foregoing Comments into account as it moves forward to finalize the Guidance to its jurisdictional utilities for the development of their respective DRPs.

Respectfully submitted,

By: 

Laurence G. Chaset
Keyes, Fox & Wiedman LLP
436 14th Street, Suite 1305
Oakland, CA 94612
Phone: 510.314.8386
Fax: 510.225.3848
lchaset@keyesandfox.com

Counsel to the World Business Academy

December 12, 2014